Table of contents

Saturday 13 September 2014	
Sunday 14 September 2014	
Monday 15 September 2014	 ,

2014 Long-range plan Joint Town Meetings on QCD at Temple University

Saturday 13 September 2014

Phases of QCD Matter / Opening: Chair: Ulrich Heinz and Paul Sorensen - 217CD (08:30-09:00)

1	time	title	presenter
	08:30	Opening remarks / Local organizing committee	SURROW, Bernd
	08:45		HEINZ, Ulrich SORENSEN, Paul

QCD and Hadron Physics / Opening: Chair: Haiyan Gao and Craig Roberts - 217AB (08:30-09:00)

time	title	presenter
08:30	Opening remarks / Local organizing committee	SPARVERIS, Nikos
08:45		GAO, Haiyan ROBERTS, Craig

Phases of QCD Matter / Theory Overview: Chair: Steve Vigdor - 217CD (09:00-10:30)

time	title	presenter
09:00	Open questions in theory, why they are interesting, what tools we have to address them	RAJAGOPAL, Krishna
09:30	Discussion	
09:45	Lattice QCD for RHIC and LHC: From now to the next decade	MUKHERJEE, Swagato
10:15	Discussion	

QCD and Hadron Physics / Hadron Structure at Short Distance I: Chair: Sebastian Kuhn - 217AB (09:00-10:30)

time	title	presenter
09:00	Theoretical Overview: Nucleon spin structure and orbital angular momentum	QIU, Jianwei
09:30	Experimental overview: Nucleon spin structure	SEIDL, Ralf
10:00	Parton distribution functions	PENG, Jen-Chieh

<u>Phases of QCD Matter / QGP evolution, EOS and transport properties: Chair: Volker Koch - 217CD (11:00-12:30)</u>

tiı	me	title	presenter
11	:00	The standard model for QGP evolution: Theoretical status and future	SCHENKE, Bjoern
11	1:30	Discussion	

11:45	The standard model for QGP evolution: Experimental status and future	SNELLINGS, Raimond
12:15	Discussion	

QCD and Hadron Physics / Hadron Structure at Short Distance II (Incl. Short presentations): Chair: Feng Yuan - 217AB (11:00-12:15)

time	title	presenter
11:00	Nucleon tomography	METZ, Andreas
11:30	Pre-Town Meeting summary	PROKUDIN, Alexei GAMBERG, Leonard
11:36	SoLID	CHEN, Jian-Ping
11:42	Polarized Drell-Yan at FNAL	LORENZEN, Wolfgang
11:48	The importance of a new transverse spin program at RHIC and its impact on future e+p physics	LIU, Ming
11:51	Correlations between target and current fragmentation in SIDIS	AVAKIAN, Harut
11:54	Tensor Spin Observables	LONG, Elena
11:57	SoLID-PVDIS (d/u)	SOUDER, Paul
12:00	Studies of chiral-odd GPDs in exclusive production of pseudoscalar mesons	KIM, Andrey
12:03	JLab GPD program results and projections at 12 GeV	GIROD, Francois-Xavier
12:06	Future prospects of di-jet production constraining delta g(x) at low x at STAR at RHIC	SURROW, Bernd

QCD and Hadron Physics / Hadron Structure at Long Distance (Incl. Short presentations): Chair: <u>John Arrington</u> - 217AB (13:15-15:30)

time	title	presenter
13:15	Electro-magnetic Form Factors of nucleons	GILMAN, Ron
13:40	Parity-violating electron scattering and Hadron Structure	KUMAR, Krishna
14:05	Charged pion form factors	HORN, Tanja
14:25	Expressions of chiral dynamics in hadrons and nuclei	PHILLIPS, Daniel
14:45	Probing Hadron Structure with Photons	HOWELL, Calvin
15:05	The axial form factor of the proton	PATE, Steve
15:08	Q-Qbar Creation Studies	MESTAYER, Mac
15:11	J/Psi near threshold from SoLID	ZHAO, Zhiwen
15:14	Problems with the Two-Nucleon System	NORUM, Blaine
15:17	Chiral dynamics: 2 photons and a few nucleons	GRIESSHAMMER, Harold
15:20	Nucleon EM polarizabilities from Compton Scattering below pion threshold	AHMED, Mohammad
15:23	Elastic Nucleon Form Factor Program with Super Bigbite	RIORDAN, Seamus

Phases of QCD Matter / BES and QCD Phase Diagram: Chair: Rosi Reed - 217CD (13:30-15:00)

time	title	presenter
13:30	BES I Results, Motivation for BES II, Future Facilities	CEBRA, Daniel
14:00	Discussion	
14:10	Studying the QCD Phase Diagram via BES	STEPHANOV, Mikhail
14:30	Dynamical modeling at low collision energy and high mu_b	PETERSEN, Hannah
14:50	Discussion	

<u>Phases of QCD Matter / Community Input: Chair: Ulrich Heinz and Paul Sorensen</u> - 217CD (15:00-15:30)

time	title	presenter
15:00	Studying the QCD phase structure at high baryon density	XU, Nu
15:07	Quantifying the properties of QCD matter with relativistic heavy-ion collisions	PRATT, Scott
15:14	Forward-central pion-quarkonia correlations at RHIC	SUMBERA, Michal
15:21	Coherent pion photoproduction	BRISCOE, William

Joint Session: Chair: Jim Napolitano - 217ABCD (16:00-18:35)

time	title	presenter
16:00	Introduction - Temple University President	MEZIANI, Zein-Eddine
16:05	Welcome Address by Temple University President	THEOBALD, Neil
16:15	Nuclear Theory since 2007 and for the next decade: An overview	KAPLAN, David
16:45	Discussion	
16:55	Highlights from QCD and Hadron Physics since 2007	ENT, Rolf
17:15	Vision for QCD and Hadron Physics	MAKINS, Naomi
17:35	Discussion	
17:45	RHIC and LHC Overview: Where are we? Where are we going?	ZAJC, Bill
18:25	Discussion	

<u>Joint Session: Chair: Richard Milner</u> - 217ABCD (18:45-20:00)

time	title	presenter
18:45	Why we need an EIC: a view from 30,000 feet	MUELLER, Berndt
19:05	Why we need an EIC: a view from 10,000 meters	MCKEOWN, Bob
19:25	Discussion	

Sunday 14 September 2014

Joint Session: Chair: Jianwei Qiu - 217ABCD (08:30-11:00)

time	title	presenter
08:30	Theoretical issues in Nucleon Structure	JI, Xiangdong
09:00	Probing Nucleon Structure at an EIC	MEZIANI, Zein-Eddine
09:30	Probing the properties of QCD with atomic nuclei: theoretical aspects	KOVCHEGOV, Yuri
10:00	Probing the properties of QCD with atomic nuclei: experimental aspects	ULLRICH, Thomas
10:30	Discussion	

Joint Session / Community Input: Chair: Craig Roberts - 217ABCD (11:20-12:40)

time	title	presenter
11:20	Next-generation nuclear DIS with spectator tagging at EIC	WEISS, Christian
11:25	Neutron Spin Structure via Spectator Tagging at the EIC	HYDE, Charles
11:30	Transverse momentum dependence of sea quark distributions	AVAKIAN, Harut
11:35	Why QGP Physicists should want to study e+A	JACAK, Barbara
11:40	Joint Session / EIC White paper discussion - Part I	

Joint Session / EIC White paper discussion: Chair: Abhay Deshpande - 217ABCD (13:40-14:45)

time	title	presenter
13:40	Joint Session / Discussion about EIC part of the white paper writing and assignments - Part II	

Joint Session / Reports from other Town Meetings: Chair: Paul Sorenson - 217ABCD (14:45-16:00)

time	title	presenter
14:45	Report from Computational Nuclear Physics Town Meeting	PETRECZKY, Peter
15:00	Report from Computational Nuclear Physics Town Meeting	SAVAGE, Martin
15:15	Report from Education and Innovation Town Meeting	KEPPEL, Thia
15:30	Discussion	

Phases of QCD Matter / Low-x, pA, spin: Chair: Adrian Dumitru - 217CD (16:30-18:00)

time	title	presenter
16:30	Unique opportunities in p+A collisions at RHIC and LHC	KANG, Zhong-Bo
16:50	Discussion	
17:00	p+A experiments at RHIC and the LHC and related upgrades	LAJOIE, John
17:20	Discussion	

17:30	Opportunities for RHIC Spin in the Coming Decade	ASCHENAUER, Elke
17:50	Discussion	

QCD and Hadron Physics / Theory (Incl. Short presentations): Chair: Craig Roberts - 217AB (16:30-18:30)

time	title	presenter
16:30	Lattice-based studies of QCD	RICHARDS, D.G.
17:00	Continuum-based studies of QCD	CLOET, Ian
17:30	pQCD at the collider (LHC/RHIC)	STEWART, Iain
18:00	Precision Jet Physics in Electron-Proton Collisions	LEE, Chris
18:03	OAM and GTMDs	LIUTI, Simonetta
18:06	The prospects of two-photon physics with lattice QCD	TIBURZI, Brian
18:09	Transverse force on quarks in DIS	BURKARDT, Matthias

Monday 15 September 2014

Phases of QCD Matter / Jet studies of QCD matter: Chair: Jiangyong Jia - 200B (08:30-10:00)

time	title	presenter
08:30	Probing properties of QGP with jets at RHIC and LHC: a theoretical perspective	WANG, Xin-Nian
08:50	Discussion	
09:00	Jet studies at LHC & RHIC now and tomorrow	ROLAND, Gunther
09:20	Discussion	
09:30	What jets studies at RHIC can tell us about QGP properties	NAGLE, Jamie
09:50	Discussion	

QCD and Hadron Physics / Hadron Spectroscopy I: Chair: Volker Burkert - 217AB (08:30-10:00)

time	title	presenter
08:30	Theory Overview: QCD and Meson spectrum	PENNINGTON, Michael
09:00	Experiment Overview on Meson Spectroscopy: Current and future	MEYER, Curtis
09:30	Theory Overview on Baryon Spectroscopy	DOERING, Michael

<u>Phases of QCD Matter / Heavy quarks and quarkonium as a probe of the QGP: Chair: Xin-Nian Wang</u> - 200B (10:20-11:20)

time	title	presenter
10:20	Experimental summary of the next decade with heavy quarks and quarkonium	RUAN, Lijuan
10:40	Discussion	
10:50	Theory: what we know about the QGP from HQ and what we can still learn	TEANEY, Derek
11:10	Discussion	

QCD and Hadron Physics / Hadron Spectroscopy II (Incl. Short presentations): Chair: Patrizia Rossi - 217AB (10:20-11:10)

time	title	presenter
10:20	Experimental overview on Baryon Spectroscopy: Current and future	GOTHE, Ralf
10:45	Baryon Spectroscopy with Photoproduction of Mesons at MAMI - Mainz	BRISCOE, William
10:48	Why we need meson beams	STRAKOVSKY, Igor
10:51	Hadron spectroscopy at FIU: New Opportunities	GUO, Lei
10:54	Contribution to LRP from the N* structure exploration in exclusive electroproduction	MOKEEV, Victor
10:57	XYZ states in charmonium and bottomonium	MITCHELL, Ryan
11:00	Amplitude analysis: linking experiment and theory	SZCZEPANIAK, Adam

QCD and Hadron Physics / QCD and Nuclei: Chair: Haiyan Gao - 217AB (11:10-13:00)

time	title	presenter
11:10	Effect of short-range interactions on nuclei	HIGINBOTHAM, Doug
11:40	Nuclei at short distance scales	SOLVIGNON, Patricia
12:05	Parton distributions in nuclei	MELNITCHOUK, Wally
12:35	Short presentations and general discussion	WELLER, Henry

<u>Phases of QCD Matter / Community Input: Chair: Ulrich Heinz and Paul Sorensen - 200B</u> (11:20-13:00)

time	title	presenter
11:20	Interplay of QCD and electromagnetism in relativistic heavy-ion collisions	YEE, Ho-Ung
11:27	Dileptons and chiral symmetry restoration	HOHLER, Paul
11:34	Future Dilepton Measurements at RHIC	GEURTS, Frank
11:41	Soft photon measurements: present and future	SAKAGUCHI, Takao
11:48	Upsilon measurements with sPHENIX	FRAWLEY, Tony
11:55	Future high statistics heavy flavor physics opportunities with the ALICE Run 3 upgrade	NATTRASS, Christine
12:02	Summary of the 3rd Workshop on Jet Modification in the RHIC and LHC Era	REED, Rosi
12:09	Jet-hadron, gluon-hadron and hadron-hadron angular correlations at p_T=10-20 GeV/c	FRANTZ, Justin
12:16	Effective theory for precision jet physics in heavy ion collisions beyond the energy loss approach	VITEV, Ivan
12:23	Calculating jet transport coefficients in lattice QCD	MAJUMDER, Abhijit
12:30	Future low-x opportunities at the LHC: ALICE FoCal	PUTSCHKE, Joern
12:37	The importance of running p+A at RHIC during the JLab-12 GeV e+A era and its impact on the future EIC e+A physics	LIU, Ming
12:44	Ultraperipheral heavy-ion physics with CMS	TAKAKI, Daniel
12:51	A new frontier for RHIC: Collectivity and thermalisation in small systems	SCHUKRAFT, Juergen

<u>Phases of QCD Matter /WP discussion and draft recommendations: Chair: Ulrich Heinz and Paul Sorensen</u> - 200B (14:00-16:00)

time title	presenter
14:00 WP discussion and draft recommendations	

QCD and Hadron Physics / Discussion, WP writing and assignments, Recommendations: Chair: Haiyan Gao and Craig Roberts - 217AB (14:00-16:00)

time t	ritle	presenter
14:00 I	Discussion, WP writing and assignments, Recommendations	

<u>Phases of QCD Matter / More WP discussion: Chair: Ulrich Heinz and Paul Sorensen</u> - 200B (16:30-17:30)

time	title	presenter
16:30	Vote on recommendations and structure of WP, Writing assignments	